

Fact Sheet

1. Section 10 (Table 1- Outfalls 004, 005, 008, 009, 016, 018, 019, 021, 025, and 029): Updates requested to outfall descriptions and/or substantially identical outfalls designations.

Staff Response:

The information shown in Table 1 is taken directly from Table 3510-2F-IVC-3 of the application submitted by the facility in February 2014. Staff requests a revised Table 3510-2F-IVC-3 be submitted, along with rationale for each change, prior to these changes being made.

Fort Belvoir Response: See Attachment 3 for updated Table 3510-2F-IVC-3

Staff Response:

The requested updates have been completed based on the additional information provided.

2. Section 15.c (Metals Criteria): There are multiple outfalls throughout attachment 5 that were assigned action levels for metals (i.e. copper, silver, arsenic, mercury, nickel, selenium, zinc, etc.) without a clear explanation as to why and without a discussion as to the local soil types that can influence natural levels of metals that can be washed out, especially in terms of groundwater.

If any metal testing would need to occur, we believe that a background analysis of the soils at the respective locations would need to be conducted prior to assigning any benchmark limit since soils could naturally, without any discharge of metals from industrial activities, already exceed the prescribed levels.

Without proper justification as to what specifically drives the sampling requirements and without a local background analysis to which a maximum allowance can be added, we believe that the metal sampling requirements need to be reconsidered.

Staff Response:

Detailed explanation and justification for all sampling requirements is presented on an outfall-by-outfall basis within Attachment 5. Part III.A.9.b of the facility's draft permit provides allowances for natural background pollutant levels including those substances naturally occurring in soils or groundwater. As such, metals sampling requirements shall remain in place where appropriate. Additionally, please note that the action level or "benchmark" is not a limitation, but rather a target value. An exceedance of an action level requires the permittee to review the Stormwater Pollution Prevention Plan (SWP3) and modify as necessary to address any deficiencies that caused the exceedance.

Fort Belvoir Response: What modifications to the SWPPP would be required or expected if continued exceedances are found from active remediation sites (i.e. SWMUs under Long Term Monitoring for groundwater)? These have no activities occurring on them and therefore no feasible way to mitigate contributions from discharges, seeps, etc. Would Corrective actions taken due to deficiencies found during annual inspections at these SWMUs be sufficient (i.e. maintaining vegetative cover and mitigating erosion found on-site)?

Staff Response:

SWP3 modifications and/or corrective actions are determined on a case-by-case basis at the discretion of the permittee and are therefore not stipulated within VPDES permits. Please contact your water compliance inspector upon issuance of the permit if further discussion is warranted.

3. Section 20 (Solid Waste Management Units): Over 192 of these SWMUs have received closure from USEPA and VaDEQ as summarized in the VaDEQ statement of basis published October 20, 2014. The Statement of basis also identifies Corrective action for 5 additional SWMUs.

Staff Response:

No response is required.

Fort Belvoir Response: We request that the statement be modified to show efforts made since the 1992 study: “Staff reviewed a document titled *Corrective Measures Study Report for Compliance Cleanup Site CC-A05* developed by Fort Belvoir Environmental and Natural Resources Division in September 2013. This report references a SWMU study conducted by CH2M Hill in 1992 in which the total number of SWMUs at Fort Belvoir was determined to be 248. Over 192 of these SWMUs have received closure from USEPA and VADEQ as summarized in the VADEQ Statement Of Basis published October 20, 2014.”

Staff Response:

The statement has been modified as requested.

4. Section 20 (Solid Waste Management Units): Fort Belvoir has performed extensive investigations, sampling, and reporting in relation to these SWMUs. They are all currently being managed under the Fort Belvoir's RCRA Part B Permit which took effect August 10th, 2015.

Module IV of the RCRA Permit (VA7213720082) contains a full report on all SMWUs and associated corrective action plans

An entire document repository for SMWUs has also been submitted to VaDEQ Central Office by the Restoration group.

Since the information on SWMUs that is being requested as part of the study has been submitted to VaDEQ through the means of other programs, we do not believe there is a need to incorporate a SWMU study into this permit.

Staff Response:

Staff acknowledges the investigations and sampling conducted by Fort Belvoir under the installation’s RCRA Part B permit. However, these efforts do not fully characterize the potential for contamination of stormwater runoff from the outfalls identified in Part I.A.1 – Part I.A.33 of the draft permit. Additionally, the information provided in the March 12, 2012 memorandum for record is based on the application that was submitted in May 2013. This application was subsequently revised and resubmitted in March 2014. As such, the information provided in the memorandum for record is not consistent with the current application.

Based on the above, the requirement for an evaluation of SWMUs remains in the draft permit. However, the language has been modified to take in to account previous work conducted by the installation.

Fort Belvoir Response: Fort Belvoir concurs that the MFR dated March 21, 2012 (typo above?) that was originally provided is both out of date and inadequate and will provide a full SWMU evaluation along with the next permit renewal. But, it is likely that we will not have sufficient qualifying rainfall events to meet the sampling requirements if we start sampling with year three (3). Would it be possible to initiate monitoring prior to the third year?

Staff Response:

The requirement for monitoring has been revised from starting in the third year of the permit to starting in the second year of the permit.

Fort Belvoir Response: The permit in Part 1, Page 38 of 37, 3.b. could you please clarify in the permit text that only SWMUs located within the drainage area of an Industrial Stormwater Outfall covered in this permit are included in the sampling requirements. The text as currently written is unclear and could lead one to infer that any SWMU on the Installation would need to be monitored.

Staff Response:

This language has been clarified as requested.

Fort Belvoir Response: In addition, please include a paragraph that specifies the requirements and/or any procedures for a SWMU that is being closed during the life of the permit. (i.e would monitoring continue for the full permit cycle or can a note be made on the DMR in regards to closure?)

Staff Response:

Language has been added within the permit to address potential SWMU closures during the permit term.

5. Section 21 (Polychlorinated Biphenyls): This action was completed as a requirement of the MS4 permit (VAR 040093).

A PCB TMDL Action Plan (see attached) was submitted to VaDEQ on September 26, 2013 along with the annual report. This plan was assumed to be final on January 26, 2014 because no comments were received from VaDEQ within the allotted [sic] time. (9VAC25-870-108)

Monitoring and Sampling is currently being done as per the Final Plan.

As with the SWMU study we feel that this should not be a requirement, as the information has already been submitted.

Maybe we can just insert a reference to the document instead.

In addition, Fort Belvoir's Installation Restoration Program has already investigated, sampled, and re-mediated a number of historical PCB sites and received subsequent closure from VADEQ and US EPA for these sites. For any PCB sites not already addressed, Fort Belvoir's Installation Restoration Program has submitted for approval of ERA funds to address these sites.

Staff Response:

Staff acknowledges the completion of a PCB TMDL Action Plan required by the installation's Phase II MS4 permit. However, we are uncertain as to whether the investigations completed for the MS4 permit adequately address and ultimately characterize the potential for contamination of stormwater runoff from the industrial outfalls identified in the draft permit. Additionally, the information within the PCB TMDL Action Plan was completed prior to the submission of a revised application in March 2014. As such, the information included in the PCB TMDL Action Plan may not include all of the outfalls identified in Part I.A.1 – Part I.A.33 of the draft permit.

Based on the above, the requirement for PCB monitoring remains in the draft permit. However, if the installation can provide information that the PCB TMDL Action Plan addresses all outfalls within Part I.A.1 – Part I.A.33 of the draft permit, staff will reconsider the inclusion of PCB monitoring.

Fort Belvoir Response: Although the 2012 PCB TMDL plan considered all historical PCB locations across the installation, Fort Belvoir will be revising and updating the Plan so that will capture newly discovered sites. But, due to the considerable time it takes to acquire funds and/or modify existing contracts we would like to request to continue monitoring under the current plan until an updated plan and sampling contract has been obtained.

Staff Response:

Current PCB sampling is being conducted under the installations Phase II MS4 permit (VAR040093) which is a separate permitting program. As such, sampling should continue as described within that plan and as required by the MS4 permit. The installation may wish to consider consolidating the plans in the future.

Fort Belvoir Response: Also, the permit states that “the stormwater characterization, development of a plan for PCB sampling, and actual sampling shall be conducted during the initial term of the permit...” Please define ‘the initial term,’ does this refer to the life of this permit (5 years), or does this refer to the first year, or the initial 6 month period? Please specify or provide written guidance.

Staff Response:

The initial permit term refers to the first five year cycle of VPDES permit VA0092771. This has been clarified within the fact sheet and permit.

6. Section 28(Staff Comments): Request to update time frame associated with relocation of 249th Prime Power Unit from September – October 2015 to June – July 2016.

Staff Response:

The information has been updated as requested.

Fort Belvoir Response: This project is still under design and ESC and SWM review at VADEQ, this has been pushed to early 2017 date because of comments received during the design.

Staff Response:

This date has been revised to “2017” in both the Fact Sheet and Attachment 5.

Fact Sheet Attachments

1. Attachment 4 (Significant Materials): The facility request that HazMart Building be changed to HazWaste (<90days) on Table 3510-2F-IV-B-2.

Staff Response:

The table found within the above attachment was originally submitted with the permit application. As such, staff does not have a version that can be updated. Please provide an updated Table 3510-2F-IV-B-2 so this comment may be addressed.

Fort Belvoir Response: Updated Table 3510-2F-IV-B-2 can be found in attachment 4.

Staff Response:

The requested update has been completed based on the additional information provided.

2. Attachment 5 (Outfall 004): Only the Cullum Woods landfill (A-01) is mentioned here although there is a second landfill (Poe Road Landfill A-11) within the drainage area for this outfall.

Staff Response:

The information shown for Outfall 004 was extracted from information provided by the permittee (shown as Attachment 11). The information notes that there are two landfills. However, only Cullum Woods is identified. Please provide an update to this information so this comment may be addressed.

Fort Belvoir Response: An updated 'Attachment 11 Table' can be found as Attachment 5

Staff Response:

The update to the Attachment 11 table still does not address the above comment. The updated continues to note two landfills with only Cullum Woods being identified. As such, no changes were made to Attachment 5 of the Fact Sheet.

3. Attachment 5 (Outfall 004): Cullum Woods Landfill (A-01) - USEPA Region III approved Closure date is July 6, 2012.

Staff Response:

The information has been updated. Staff requests that a closure date be provided if the information in Attachment 11 is updated to reflect the Poe Road Landfill.

Fort Belvoir Response: An updated 'Attachment 11 Table' can be found as Attachment 5

Staff Response:

The update to the Attachment 11 table still does not address the above comment. The updated continues to note two landfills with only Cullum Woods being identified. As such, no changes were made to Attachment 5 of the Fact Sheet

4. Attachment 5 (Outfall 005): The facility request that HazMart Building be changed to HazWaste.

Staff Response:

All information within the application pertaining to the Building 1495 referred to it as the HazMart Building. Please provide updates to all components of the application that refer to Building 1495 as the HazMart Building showing the requested name along with rational for the change so this comment may be addressed.

Fort Belvoir Response: Updated Table 3510-2F-IV-B-2 can be found in attachment 4

Staff Response:

The requested update has been completed based on the additional information provided.

5. Attachment 5 (Outfall 009): SIC Codes 0782 (Lawn and Grounds Maintenance) and 8744 (Facilities Support Management) are not included in this discussion.

Staff Response:

SIC Codes 0782 and 8744 were not provided as part of the application that was submitted. If the facility believes these SIC Codes should be included as part of the discussion for this outfall, please provide updates to all components of the application that refer to Outfall 008 and its associated SIC Codes along with rational for the change so this comment may be addressed.

Fort Belvoir Response: Updated Table 3510-2F-IVC-3 can be found in attachment 3

Staff Response:

The updated table provided in attachment 3 did not include SIC Codes 0782 and 8744. As such, they are not addressed within the Fact Sheet.

6. Attachment 5 (Outfall 009): This discussion fails to mention the Lawn & Grounds Maintenance SIC Code 0782, and the Facilities Support Management SIC code 8744 that are applicable to this outfall.

Staff Response:

SIC Codes 0782 and 8744 were not provided as part of the application that was submitted. If the facility believes these SIC Codes should be included as part of the discussion for this outfall, please provide updates to all components of the application that refer to Outfall 009 and its associated SIC Codes along with rational for the change so this comment may be addressed.

Fort Belvoir Response: Updated Table 3510-2F-IVC-3 can be found in attachment 3

Staff Response:

The updated table provided in attachment 3 did not include SIC Codes 0782 and 8744. As such, they continue to not be addressed within the Fact Sheet.

7. Attachment 5 (Outfall 009): The Golf Course grounds and maintenance is directly upstream, the monitoring section specifically shows Chloride (related to winter salt application) as being required for monitoring.

Staff Response:

No response is required.

Fort Belvoir Response: Swank Road is not an access road to the Golf Course storage facility that is included in the Installation's Snow Removal Plan, and snow removal has not been performed on Swank Road in many years per the Operations and Maintenance Division staff. The roads interior of the golf course are not being maintained in any way during snow events, since the golf course holes are closed during inclement weather. In addition, the storage facility does not store any road salt for treatment. The storage facility has an access road off of Beulah Road Gate that is being maintained during snow events. However, this road drains not toward Outfall 009, but

drains towards Beulah and Telegraph Roads, towards Kernan Run. Therefore, sampling for Chloride should not be required at this outfall as any salt usage will not be captured during monitoring.

Staff Response:

The update to the Attachment 11 table still indicates salt storage associated with Outfall 009. Additionally, since the drafting of the permit a chloride TMDL has been proposed for the Accotink Creek watershed. Since the outfall is located within the Accotink Creek watershed it is appropriate that chloride monitoring be implemented for this outfall. As such, chloride monitoring shall remain in the draft permit for Outfall 009.

8. Attachment 5 (Outfall 015): The facility request that 16th Street Storage Area be changed to 16th Street Storage Area (Base Operations).

Staff Response:

All information within the application pertaining to the 16th Street Storage Area referred to it as such. Please provide updates to all components of the application that refer to the 16th Street Storage Area showing the requested name along with rational for the change so this comment may be addressed.

Fort Belvoir Response: See Enclosure

Staff Response:

The requested update has been completed based on the additional information provided.

9. Attachment 5 (Outfall 025): Given the nature of the industrial activity, there are no comments or issues with the information and requirements with this Outfall location for sampling and monitoring except to question not asking for the analysis of Total Petroleum Hydrocarbon (TPH). Considering the state of the location and the condition of the contractor's equipment on site, it was assumed this would be a requirement at this site.

Staff Response:

Based on observations made during the site visit, the industrial activities taking place within the drainage area of this outfall are consistent with those associated with an open dump. Monitoring requirements were established based on these observations and the SIC Code provided within the application. As such, staff did not believe there was a regulatory basis for the inclusion of TPH monitoring for this outfall. However, if the facility wishes TPH monitoring to be included for this outfall, staff is amenable to that request.

Fort Belvoir Response: We would like to request the inclusion of TPH for the sampling at this outfall, due to the nature of the materials stored and operations at the facility.

Staff Response:

Monitoring for TPH has been added as requested by the facility.

10. Attachment 5 (Outfall 026): The outfall for this location is in between the two SWMU sites A08 and A09. Also there is a difference between a landfill closure and a SWMU closure. What is the specific information being requested, the landfill closure or the SWMU closure? Fort Belvoir needs clarification before this can be answered. Refer to EPAs CMS Approval Letter Dated May 19, 2014

NOTE: Sufficient MNA data has been collected and it has been determined that it (MNA) is the appropriate corrective measure for groundwater at these sites; although the action is not yet finalized. Impact on these metals analysis requirements?

Staff Response:

Staff requests the date of landfill closure if available. Clarification is needed as to the question relating to the impact on metals analysis requirements as there are no metals monitoring requirements for Outfall 026.

Fort Belvoir Response: CC-A08, the George Washington Village Landfill, is an inactive sanitary and construction debris landfill approximately 8.5 acres in size, located directly east of Mount Vernon Road, west of Dogue Creek, and north of CC-A09. The site was in operation from the 1930s until 1956 and was closed with a soil cover at least 2 feet thick. CC-A09, Markham School Landfill, is an inactive sanitary landfill approximately 15 acres in size, located directly east of Mount Vernon Road, west of Dogue Creek, and south of CC-A08. CC-A09 was in operation from the 1930s until 1956 and was closed with a soil cover of at least 2 feet thick.

Staff Response:

The requested update has been completed based on the additional information provided.

11. Attachment 5 (Outfall 027): 'Primary Industrial Activity' appears to be asking for the information on the closure date of the landfills at this site (A02)? Fort Belvoir needs clarification before this can be answered. Refer to EPA Approval of Closure Letter Dated July 6, 2012.

NOTE: A02 (Theote Road Landfill) is currently being managed under the Solid Waste Program but ground water monitoring will continue under the MP2.

Staff Response:

Staff requests the date of landfill closure if available. Clarification is needed as the note associated with the comments for Outfall 027. Until such clarification is provided, no response is required.

Fort Belvoir Response: The Theote Road Debris Landfill was described as a 4 acre unlined landfill located 1,500 feet east of Theote Rd and 800 feet west of Accotink Bay. The former landfill began accepting construction and demolition debris in 1978. Waste included bricks, concrete, asphalt, lumber, etc... The landfill operated under Virginia Solid Waste Permit #490 from November 1985 to October 9, 1993. According to the 1997 Action plan a Closure report was prepared by Dewberry and Davis in 1990. An updated closure plan was prepared by SCS Engineers, Inc. in September 1993 to satisfy the Virginia Solid Waste Management regulations promulgated in March 1993 by VDEQ. The updated closure plan which included groundwater monitoring, LFG and leachate collection was approved by VDEQ in 1994. Closure activities were performed between March and July 1995. The final closure report was finalized in October of 1995. The landfill then went through a ten year post closure care phase which included periodic groundwater and landfill gas monitoring and inspections of the landfill. VDEQ performed an inspection of the landfill in June 1996, as part of the closure approval process.

Staff Response:

The requested update has been completed based on the additional information provided.

12. Attachment 5 (Outfall 028): 'Primary Industrial Activity' appears to be asking for the information on the closure date of the landfills at this site (A06)? Also there is a difference between a landfill closure and a SWMU close. What is the specific information being requested, the landfill closure or the SWMU closure? Fort Belvoir needs clarification before this can be answered. Refer to EPA NFA approval letter dated December 7, 2012.

Staff Response:

Staff requests the date of landfill closure if available.

Fort Belvoir Response: The Kingman landfill stopped receiving waste in the 1950's. The date, the landfill received USEPA NFA approval with LUCS is December 7, 2012.

Staff Response:

The requested update has been completed based on the additional information provided.

13. Attachment 5 (Outfall 029): The outfall for this location is in between two SWMU's A07 and A25. Also there is a difference between a landfill closure and a SWMU close. What is the specific information being requested, the landfill closure or the SWMU closure? Fort Belvoir needs clarification before this can be answered. Refer to EPA NFA approval letter dated December 7, 2012.

Staff Response:

Staff requests the date of landfill closure if available.

Fort Belvoir Response: SWMU A-07, the Mulligan Road Landfill, is located within a former troop training area, and operated as a borrow area until approximately 1978. From about 1978 until 1986, the resulting excavation was filled with construction debris (largely wood debris) generated by the demolition of World War II era barracks. Other demolition materials reportedly disposed in the landfill included asbestos covered pipe and 250-gallon residential heating oil tanks. The deepest disposal area was along the west side of the site, with a depth of approximately 20 ft. At the conclusion of the disposal activities, the area was covered with two feet of clean fill. SWMU A-25 is a forest clearing located approximately 1,500 feet southwest of the intersection of Kingman and Mulligan Roads. The 1988 Draft Phase II RFA described an area in this vicinity as a historical sanitary landfill operated prior to 1940. The SWMU is approximately 8 acres in size. Disposal of concrete curb/gutter and sidewalk debris at SWMU A-25 reportedly occurred in approximately 1979 or 1980; the materials were generated by a U.S. Army Corps of Engineers project elsewhere at Fort Belvoir. The disposal area was covered with more than two feet of clean fill in the mid 1980s.

Staff Response:

The requested update has been completed based on the additional information provided.

14. Attachment 5 (Outfall 030): 'Primary Industrial Activity' appears to be asking for the information on the closure date of the landfills at this site (A26)? Also there is a difference between a landfill closure and a SWMU close. What is the specific information being requested, the landfill closure or the SWMU closure? Fort Belvoir needs clarification before this can be answered. Refer to EPA NFA approval letter dated January 23, 2013.

Staff Response:

Staff requests the date of landfill closure if available.

Fort Belvoir Response: This unit was first identified as a SWMU during the 1988 RFA. The RFA identified SWMU A-26 from historical documentation as a sanitary landfill that operated during the mid-1950s. The RFA reported that the unit was located in the southeastern part of the facility, south of Pohick Road; however, the precise location was not found during the RFA. According to the 1992 SWMU Study, SWMU A-26 was a landfill as illustrated on old installation site maps and on a post map dated 26 March 1958.

Staff Response:

The requested update has been completed based on the additional information provided.

15. Attachment 5 (Outfall 032): Edit “This move in tentatively slated for September – October 2015 to allow for construction of a new entrance to the installation” to “This move in tentatively slated for June – July 2016 to allow for construction of a new entrance to the installation”.

Staff Response:

This item has been updated.

Staff Response:

Although Fort Belvoir did not provide a comment on this item, based on previous comments made this date has been revised to “2017” in both the Fact Sheet and Attachment 5.

Permit

1. Part I.A - Please Refer to Comments on the Permit Fact Sheet for comments on individual outfall requirements for Part I.A.1-33.

Staff Response:

Part I.A pages will be updated as appropriate based on the Fact Sheet comments provided.

Staff Response:

Although Fort Belvoir did not provide a comment on this item, requested updates have been completed based on the additional information provided.

New Items

1. **Fort Belvoir Comment:** Page 38 of 37 of VA0092771, Part 1: Water Quality Monitoring – Solid Waste Management Units (SWMU).

- a. Fort Belvoir requests to be able to start sampling at the second year since there will be likely not sufficient qualifying rain events to accomplish this requirement as specified if sampling starts at year 3.

Staff Response:

The requirement for monitoring has been revised from starting in the third year of the permit to starting in the second year of the permit.

- b. In addition, please include language/guidance as to what the requirements will be if a SWMU is closed. Are we able to provide closure documents in lieu of sampling?

Staff Response:

Language has been added within the permit to address potential SWMU closures during the permit term.

2. **Fort Belvoir Comment:** Industrial Stormwater Outfall 018 was closed off. The drainage will be captured by Industrial Stormwater Outfall 019. The Memorandum For Record is located in Attachment 6.

Staff Response:

Outfall 018 has been removed from the draft permit. Based on information provided by Fort Belvoir pertaining to the removal, flow previously directed towards Outfall 018 will now be sampled at Outfall 019, where a junction box will be installed when the full stream restoration commences. In the meantime, flows discharge at the location of the new junction box and culvert at Outfall 019. As such, all monitoring previously established for Outfall 018 will be now be applied to Outfall 019 due to the fact Outfall 018 has been permanently closed and flow directed to Outfall 019.

3. Based on correspondence received from the permittee on August 25, 2016, the draft permit has been updated to reflect the potential deicing activities taking place at Davison Army Airfield. Changes include monitoring for Propylene Glycol, Specific Conductance, and Dissolved Oxygen at Outfall 002, the inclusion of a special condition prohibiting the use of ethylene glycol and a special condition allowing for the reopening of the permit to address compliance with EPA regulations and any applicable Federal Effluent Guideline (ELG) that may be developed and approved for the airline industry.